



Patent

Docket No.: P02083US1A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Wang et al..

Serial No.: 10/791,177
Filed: March 2, 2004

Group Art Unit: 1714

Examiner:

For: **RUBBER COMPOSITION CONTAINING
FUNCTIONALIZED POLYMER
NANOPARTICLES**

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

1. Pursuant to 37 C.F.R. 1.97(b) this Statement is being filed (one must be checked):

(a) ☐ Within 3 months of the filing date or date of entry into the National Stage.

(b) ☒ Before the mailing date of a first Office Action on the merits.
If this Statement is not filed before the mailing date of a first Office Action on the merits, the required certification is given below or, in the absence thereof, the Office is authorized to charge the required fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 06-0925 for consideration of this Statement.

(c) ☐ After the period set forth in 37 C.F.R. 1.97(b) but before the mailing date of either a final action or a notice of allowance.

(1) ☐ The required certification is given below, or

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on:

3/6/06
Date

Signed

Sham J. Jax

(2) ☐ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p) for consideration of this Statement, or

(3) ☐ Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 06-0925.

(d) ☐ After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. Petition hereby is made for consideration of this Statement and the required certification indicated below.

(1) ☐ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(i)(1), or

(2) ☐ Charge the fee set forth in 37 C.F.R. 1.17(i)(1) to Deposit Account No. 06-0925.

2. Certification (if applicable)

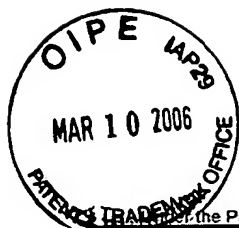
(b) ☐ The undersigned hereby certifies that no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR § 1.56(c) more than three months prior to the filing of the information disclosure statement.

March 6, 2006
Date

Respectfully submitted by:

Meredith E. Palmer
Meredith E. Palmer
Registration No. 47,839

Bridgestone Americas Holding, Inc.
1200 Firestone Parkway
Akron, OH 44317-0002
Telephone: (330) 379-6543
Facsimile No.: 330-379-4064
Email: PalmerMeredith@bfusa.com
Enclosures



PTO/SB/08A (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/791,177
Filing Date	March 2, 2004
First Named Inventor	Wang
Art Unit	1714
Examiner Name	
Attorney Docket Number	P02083US1A

Sheet 1 of 7

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US- 3,972,963	8/3/1976	Schwab et al.	
		US- 4,233,409	11/11/1980	Bulkley	
		US- 4,247,434	1/27/1981	Vanderhoff et al.	
		US- 4,463,129	7/31/1984	Shinada et al.	
		US- 4,543,403	9/24/1985	Isayama et al.	
		US- 4,659,790	4/21/1987	Shimozato et al.	
		US- 4,788,254	11/29/1988	Kawakubo et al.	
		US- 4,829,130	5/9/1989	Licchelli et al.	
		US- 4,837,274	6/6/1989	Kawakubo et al.	
		US- 4,837,401	6/6/1989	Hirose et al.	
		US- 4,870,144	9/26/1989	Noda et al.	
		US- 4,904,730	2/27/1990	Moore et al.	
		US- 4,904,732	2/27/1990	Iwahara et al.	
		US- 4,906,695	3/6/1990	Blizzard et al.	
		US- 5,075,377	12/24/1991	Kawakubo et al.	
		US- 5,120,379	6/9/1992	Noda et al.	
		US- 5,514,753	5/7/1996	Ozawa et al.	
		US- 5,169,914	12/8/1992	Kaszas et al.	
		US- 5,219,945	6/15/1993	Dicker et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
		WO 01/87999A2	11/22/2000	Faust et al.		
		WO 02/100936	12/19/2002	Exxon Chem.		
		WO 02/31002A1	4/18/2002	UAB Res. Found.		
		WO 91/04992	4/18/1991	Exxon Chem.		

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/791,177
Filing Date	March 2, 2004
First Named Inventor	Wang
Art Unit	1714
Examiner Name	
Attorney Docket Number	P02083US1A

Sheet 2 of 7

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US- 5,237,015	8/17/1993	Urban	
		US- 5,247,021	9/21/1993	Fujisawa et al.	
		US- 5,262,502	11/16/1993	Fujisawa et al.	
		US- 5,290,873	3/1/1994	Noda et al.	
		US- 5,331,035	7/19/1994	Hall	
		US- 5,336,712	8/9/1994	Austgen, Jr. et al.	
		US- 5,421,866	6/6/1995	Stark-Kasley et al.	
		US- 5,447,990	9/5/1995	Noda et al.	
		US- 5,487,054	12/8/1998	McKee et al.	
		US- 5,525,639	6/11/1996	Keneko et al.	
		US- 5,527,870	6/18/1996	Maeda et al.	
		US- 5,580,925	12/3/1996	Iwahara et al.	
		US- 5,614,579	3/25/1997	Roggeman et al.	
		US- 5,627,252	5/6/1997	De La Croi Habimana	
		US- 5,688,856	11/18/1997	Austgen, Jr. et al.	
		US- 5,728,791	3/17/1998	Tamai et al.	
		US- 5,733,975	3/31/1998	Aoyama et al.	
		US- 5,739,267	4/14/1998	Fujisawa et al.	
		US- 5,777,037	7/7/1998	Yamanaka et al.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)			
		WO2004/058874	7/15/2004	Bridgestone Corp.	
		EP 0 265 142 A2	4/27/1988	Rohm and Haas	
		EP 0 590 491 A2	4/6/1994	Bridgestone	
		EP 1 099 728 A1	5/16/2001	Chiba et al.	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/791,177
Filing Date	March 2, 2004
First Named Inventor	Wang
Art Unit	1714
Examiner Name	
Attorney Docket Number	P02083US1A

Sheet 3 of 7

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
-		US- 5,811,501	9/22/1998	Chiba et al.	
		US- 5,834,563	11/10/1998	Kimura et al.	
		US- 5,849,847	12/15/1998	Quirk	
		US- 5,855,972	1/5/1999	Kaeding	
		US- 5,883,173	3/16/1999	Elspace et al.	
		US- 6,011,116	1/4/2000	Aoyama et al.	
		US- 6,020,446	2/1/2000	Okamoto et al.	
		US- 6,025,416	2/15/2000	Proebster et al.	
		US- 6,025,445	2/15/2000	Chiba et al.	
		US- 6,060,559	5/9/2000	Feng et al.	
		US- 6,087,016	7/11/2000	Feeney et al.	
		US- 6,087,456	7/11/2000	Sakaguchi et al.	
		US- 6,106,953	8/22/2000	Zimmermann et al.	
		US- 6,117,932	9/12/2000	Hasegawa et al.	
		US- 6,121,379	9/19/2000	Yamanaka et al.	
		US- 6,147,151	11/14/2000	Fukumoto et al.	
		US- 6,268,451	7/31/2001	Faust et al.	
		US- 6,277,304	8/21/2001	Wei et al.	
		US- 6,348,546	2/19/2002	Hiiri et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	† ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
		EP 1 134 251 A1	9/19/2001	Okamoto et al.		
		JP 08-199062	8/6/1996	Mitsubishi Chem.		

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/791,177
Filing Date	March 2, 2004
First Named Inventor	Wang
Art Unit	1714
Examiner Name	
Attorney Docket Number	P02083US1A

Sheet 4 of 7

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US- 6,573,330	6/3/2003	Fujikake et al.	
		US- 6,598,645	7/29/2003	Larson	
		US- 6,649,702	11/18/2003	Rapoport et al.	
		US- 6,750,297	6/15/2004	Yeu et al.	
		US- 6,759,464	7/6/2004	Ajbani et al.	
		US- 6,835,781	12/28/2004	Kondou et al.	
		US- 6,872,785	3/29/2005	Wang et al.	
		US- 6,875,818	4/5/2005	Wang	
		US- 2002/0095008	7/18/2002	Heimrich et al.	
		US- 2002/0144401	10/10/2002	Nogueroles Vines et al.	
		US- 2003/0004250	1/2/2003	Ajbani et al.	
		US- 2003/0032710	2/13/2003	Larson	
		US- 2004/0059057	3/25/2004	Swisher et al.	
		US- 2004/0127603	7/1/2004	Lean et al.	
		US- 2004/0143064	7/22/2004	Wang	
		US- 2004/0198917	10/7/2004	Castner	
		US- 2005/0101743	5/12/2005	Stacy et al.	
		US- 2005/0203248	9/15/2005	Zheng et al.	
		US- 6,706,813	3/16/2004	Chiba et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Application Number	10/791.177
Filing Date	March 2, 2004
First Named Inventor	Wang
Art Unit	1714
Examiner Name	
Attorney Docket Number	P02083US1A

Sheet	5	of	7
-------	---	----	---

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Sheet	6	of	7	Application Number	10/791,177
				Filing Date	March 2, 2004
				First Named Inventor	Wang
				Art Unit	1714
				Examiner Name	
				Attorney Docket Number	P02083US1A

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Star Polymers by Immobilizing Functional Block Copolymers, by Koji Ishizu, Tokyo Institute of Technology, Meguro-ku, Tokyo, Japan, Star and Hyperbranched Polymers, 1999, ISBN 0-8247-1986-7	
		Formation of Worm-like Micelles from a Polystyrene-Polybutadiene-Polystyrene Block Copolymer in Ethyl Acetate, Canham et al., J.C.S. Faraday I, 1980, 76, 1857-1867	
		Anomalous Behaviour of Solutions of Styrene-Butadiene Block Copolymers in Some Solvents, Tuzar et al., Makromol. Chem. 178, 22743-2746 (1977)	
		Association of Block Copolymers in Selective Solvents, 1 Measurements on Hydrogenated Poly(styrene-isoprene) in Decane and in trans-Decalin, Mandema et al., Makromol. Chem. 180, 1521-1538 (1979)	
		Light-Scattering Studies of a Polystyrene-Poly(methyl methacrylate) Two-Block Copolymer in Mixed Solvents, Utiyama et al. Macromolecules Vol. 7, No. 4, July-August, 1974	
		Greenwood, N.N.; Earnshaw, A., Chemistry of the Elements, pp 1126-1127, Pergamon Press, New York 1984	
		Functionalized Core-Shell Polymers Prepared by Microemulsion Polymerization, E. Mendizabal et al., Dept. of Ingenieria Quimica, Univ. De Guadalajara, MX, 477/ANTE 97/1733-1737	
		Kink-Block and Gauche-Block Structures of Bimolecular Films, Gehard Lagaly, Chem. Int. Ed. Engl. Vol. 15 (1976) No. 10, pp 575-586	
		Linear Viscoelasticity of Disordered Polystyrene-Polyisoprene...Layered-Silicate Nanocomposites, J. Ren, Dept. of Chem Eng. Univ. of Houston, Macromol. 2000, pp 3739-3746	
		Rheology of End-Tethered Polymer Layered Silicate Nanocomposites, R. Krishnamoorti et al., Macromol. 1997, 30, 4097-4102	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	10/791,177		
		Filing Date	March 2, 2004		
		First Named Inventor	Wang		
		Art Unit	1714		
		Examiner Name			
Sheet	7	of	7	Attorney Docket Number	P02083US1A

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where p	T ²
		Rheology of Nanocomposites Based on Layered Silicates and Polyamide-12, B. Hoffman et al., Colloid Polm. Sci. 278:629-636 (2000)	
		Quaternary Ammonium Compounds, Encyclopedia of Chem Tech., 4th Ed. Vol. 20, 1996, Wiley & Sons, pp. 739-767	
		R.P. Quirk and S.C. Galvan, Macromolecules, 34, 1192-1197 (2001)	
		M. Moller, J.P. Spaz, A. Roescher, S. Mobmer, S.T. Selvan, H.A. Klok, Macromol. Symp. 117, 207-218 (1997)	
		T. Cosgrove, J.S. Phipps, R.M. Richardson, Macromolecules, 26, 4363-4367 (1993)	
		S. Mossmer, J.P. Spatz, M. Moller, T. Aberle, J. Schmidt, W. Burchard, Macromol. 33, 4791-4798 (2000)	
		Functionalized Core Shell Polymers Prepared by Microemulsion Polymerization, E. Mendizabal, J.E. Puga, A. Aguiar, S. Gonzalez-Villegas, 477/Antec '97/1733-1737	
		Ultrahydrophobic and Ultrayophobic Surfaces: Some Comments and Examples, Wei Chen et al., The ACS Journal of Surfaces and Colloids, May 11, 1999, Vol. 15, No. 10, pp 3395-3399, Polymer Science and Engineering Dept., Univ. of MA, Amherst, MA 01003	
		Super-Repellent Composite Fluoropolymer Surfaces, S.R. Coulson, I. Woodward, J.P.S. Badyal, The Journal of Physical Chemistry B, Vol. 104, No. 37, Sept. 21, 2000, pp. 8836-8840, Dept. of Chemistry, Science Laboratories, Durham University, Durham, DH1 3LE, England, U.K.	
		Transformation of a Simple Plastic into a Superhydrophobic Surface, H. Yildirim Erbil et al., Science Vol. 299, Feb. 28, 2003, pp. 1377-1380	

Examiner Signature		Date Considered	
-------------------------------	--	----------------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.